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CRYOVAC, INC. SEALED AIR CORP P.O. BOX 464 DUNCAN, SC 29334			PATTERSON, MARC A	
			ART UNIT	PAPER NUMBER
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/807,210  
Filing Date: July 16, 2001  
Appellant(s): PALEARI ET AL.

**MAILED**  
DEC 02 2003  
**GROUP 1700**

Paper No. 12

\_\_\_\_\_  
Mark Quatt  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed September 11, 2003.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

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**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Invention**

The summary of invention contained in the brief is correct.

**(6) Issues**

The appellant's statement of the issues in the brief is correct.

**(7) Grouping of Claims**

The rejection of claims 11 – 20 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

**(8) Claims Appealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

5,350,622	Speer et al.	10-1992
4,652,490	Arita et al.	3-1987

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11 – 13 and 16 – 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Speer et al. (U.S. Patent No. 5,350,622).

With regard to Claims 11 – 13, Speer et al disclose a multi – layer heat shrinkable film (column 12, lines 4 – 21) comprising an outer layer heat – sealing layer comprising a polyolefin (column 11, lines 33 – 40), an outer abuse layer comprising a polyamide (column 12, lines 1 – 3) and an intermediate gas barrier layer comprising polyvinylidene chloride (column 11, lines 67 – 68); with regard to the claimed aspect of the polyamide melting point being greater than 175 degrees Celsius, Speer et al teach the use of nylon 6/12 as the polyamide layer (column 8, lines 5 – 10); a melting point of greater than 175 degrees Celsius is therefore inherent to Speer et al.

With regard to Claims 16 – 18, the heat sealing layer comprises an ethylene – alpha olefin copolymer having a density less than or equal to  $0.915 \text{ g/cm}^3$  (low density polyethylene; column 8, lines 49 – 68); the claimed aspect of the melting point being less than 140 degrees Celsius therefore reads on Speer et al.

With regard to Claim 19, the film is in the form of a tubing (column 12, lines 4 – 21) where the heat – sealing layer is the innermost layer of the tube (column 11, lines 54 – 60) With regard to the claimed aspect of the tubing being ‘seamless,’ Speer et al do not disclose a tubing having seams; the claimed aspect of the tubing being ‘seamless’ therefore reads on Speer et al.

With regard to Claim 20, the film is made into a container (a bag, therefore involving the seal layer; column 13, lines 55 – 58) having the sealing layer as the inside layer and the abuse layer as the outside layer (column 11, lines 54 – 60).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14 – 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Speer et al (U.S. Patent No. 5,350,622 in view of Arita et al (U.S. Patent No. 4,652,490).

Speer et al disclose a heat shrinkable film comprising an outer polyamide layer as discussed above. With regard to Claim 14, Speer et al fail to disclose a polyamide layer which is blended with ethylene – vinyl alcohol.

Arita et al teach that polyamide blended with ethylene – vinyl alcohol is equivalent to polyamide as a layer in a heat shrinkable film (column 2, lines 30 – 52) for the purpose of making a film having superior heat shrinkability (column 2, lines 16 – 20). The desirability of blending polyamide with ethylene – vinyl alcohol in Speer et al, which is a heat shrinkable film, would therefore have been obvious to one of ordinary skill in the art.

It therefore would have been obvious for one of ordinary skill in the art to have provided for a polyamide layer which is blended with ethylene – vinyl alcohol in Speer et al in order to make a film having superior heat shrinkability as taught by Arita et al.

With regard to Claim 15, Arita et al fail to teach a blend comprising 3 – 40% ethylene – vinyl alcohol by weight. However, Arita et al teach a blend comprising 1% ethylene – vinyl alcohol by weight (the polyamide is blended with ethylene – vinyl alcohol; column 2, lines 30 –

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52). Therefore, the amount of ethylene – vinyl alcohol would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end use of the product. It therefore would be obvious for one of ordinary skill in the art to vary the amount of ethylene – vinyl alcohol, since the amount of ethylene – vinyl alcohol would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Arita et al. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

**(11) Response to Argument**

The 35 U.S.C. 112, first paragraph rejection of Claims 11 – 20 is withdrawn, as Appellant's arguments regarding the rejection have been considered and have been found to be persuasive. However, it is noted that all objects, including the layers disclosed by Speer et al and Arita et al, are oriented, because they have at least one surface that faces at least one definite direction.

Appellants arguments regarding the 35 U.S.C. 102(b) of Claims 11 – 13 and 16 – 20 as being anticipated by Speer et al. (U.S. Patent No. 5,350,622), 35 U.S.C. 103(a) of Claims 14 – 15 as being unpatentable over Speer et al (U.S. Patent No. 5,350,622 in view of Arita et al (U.S. Patent No. 4,652,490) above have been considered but have not been found to be persuasive for the reasons set forth below.

Appellants argue that the rejection is improper because Speer et al disclose an outer abuse layer that is ethylene – vinyl acetate, in column 11, lines 32 – 41, rather than a polyamide as

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claimed. However, Speer et al also teach the use of polyamide as the abuse layer, in column 12, lines 1 – 3.

Appellants also argue that Speer et al do not disclose a polyamide having a melting point of 175 degrees Celsius; the polyamide copolymer 6/12, Appellants argue, can have melting points higher or lower than 175 degrees Celsius, depending on their exact composition. However, as the exact composition of the polyamide is not claimed, the claimed polyamide does not exclude polyamide 6/12 compositions having a melting point higher than 175 degrees Celsius (column 8, lines 5 – 10).

Appellants also argue that Speer et al do not disclose a seamless tubing. However, Speer et al disclose a tubing which is made by extrusion (column 12, lines 4 – 21); furthermore, Speer et al teach that the two – layer tubular film is passed is to a coating die and the two layers are extruded as a tubular film, having the other two layers adhered to the tubular film; therefore, at no point during the formation of the tube could the formation of a seam take place.

Appellants also argue that to get from Speer to the present invention, the person skilled in the art is required to select a heat – shrinkable film as opposed to the other films taught in Speer et al; a vinylidene chloride copolymer barrier layer as opposed to the many other oxygen barrier materials taught in Speer et al; the choice of a polyamide as the outer layer; and the choice of a polyamide with a melting point higher than 175 degrees Celsius; Speer et al, Appellants argue, does not describe the combination and does not contain any suggestion leading thereto as the closest structure in the examples is a structure with ethylene vinyl acetate as the outer abuse layer.

However, Speer et al also disclose a polyamide having a melting point of 175 degrees Celsius as the outer abuse layer, as discussed above, and a vinylidene chloride copolymer barrier layer (column 11, lines 67 – 68) and a heat – shrinkable film (column 7, lines 15 – 28); Speer et al therefore discloses the materials of the claimed combination. Furthermore, the use of the transitional phrase ‘comprising’ in the claimed invention does not exclude any of the other components of Speer et al, so that it is not necessary to exclusively select the claimed materials from the other materials in Speer et al.

Appellants also argue that all of the layers of Arita et al are not oriented. However, as stated above, all objects, including the layers disclosed by Speer et al and Arita et al, are oriented, because they have at least one surface that faces at least one definite direction (column 7, lines 15 – 28).

Appellants also argue, on page 6, that Arita et al does not contain any examples which show polymer blends. However, Arita et al teach a blend of nylon 6 and ethylene vinyl alcohol having either polymer as the main component (mixture; column 2, line 40); a blend of nylon 6 and ethylene vinyl alcohol is therefore clearly taught by Arita et al.

Appellants also argue, on page 7, that one of ordinary skill in the art would not have had any motivation to blend an ethylene vinyl alcohol and polyamide for use in the outer layer of a heat – shrinkable film. However, Arita et al teach a blend of ethylene vinyl alcohol and polyamide (column 2, lines 31 – 47) for use in the outer layer of a heat – shrinkable film (column 3, lines 41 – 62) for the purpose of making a film having superior heat shrinkability (column 2, lines 16 – 20). The motivation to blend polyamide with ethylene – vinyl alcohol in the outer



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layer of a heat – shrinkable film would therefore have been obvious to one of ordinary skill in the art.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted

*Marc Patterson*  
Marc Patterson, PhD.

December 1, 2003

Conferees

Harold Pyon *[Signature]*

Deborah Jones *[Signature]*

*[Signature]*  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1/11/2